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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,727	06/27/2001	Scott Swix	7780-001040 (60027.0018US	4789

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AT&T Legal Department - LNA
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EXAMINER	
PARRA, OMAR S	

ART UNIT	PAPER NUMBER
2421	

MAIL DATE	DELIVERY MODE
10/25/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/892,727	SWIX ET AL.	
	Examiner	Art Unit	
	OMAR PARRA	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6,8-10,12-22,24-27 and 29-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6,8-10,12-22,24-27 and 29-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/10/2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 2, 4-6, 8-10, 12-22, 24-27 and 29-36 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **1, 2, 4-6, 8-10, 12-22, 24-27 and 29-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Middeke et al. (hereinafter 'Middeke', Patent No. 6,445,907) in view of Prus et al. (hereinafter 'Prus', Patent No. 7,069,578) in further view of Humpleman et al. (hereinafter 'Humpleman', Patent 6,546,419).

Regarding claims 1 and 27, Middeke teaches a method for analyzing the operation of a media distribution device (col. 2, lines 1-20), the method comprising the steps of:

determining whether a network connection is functional **(by monitoring whether a service request is received from the service center 28; Col. 6, lines 1-15)**;

determining whether a 1st diagnostic agent is functional, in response to a determination that the network connection is functional **(by detecting a service request at step 124, Col. 6, lines 17-18)**;

causing the 1st diagnostic agent, residing on the media distribution device, to collect diagnostic data associated with the media distribution device (STB), in response to a determination that the 1st diagnostic agent is functional **(gathering diagnostic information; Col. 6, lines 19-30)**;

analyzing the diagnostic data to determine an operational problem associated with the media distribution device (STB) **(service center analyzes the received diagnostic information; Col. 10, lines 60-63 and service technician remotely trouble-shoot and reconfigured the receiver; Col. 10, lines 35-55)** and with a second device not physically connected to the media distribution device **(Middeke refers to a satellite television system that serves and diagnoses not only one, but many other household terminals that are not physically connected to the first media distribution device. Therefore, the analysis of the diagnosis data is**

performed for more than one device found with problems, at least: col. 1 lines 8-10 and lines 37-60).

On the other hand, although Middeke teaches sending commands to remotely troubleshoot the receiving devices ((col. 10, lines 35-62—commands are sent to the receiver to mitigate reported problems, the commands including resetting the receiver and resetting customer preferences to factory defaults), Middeke does not explicitly teach that the commands are

"to perform at least one of upgrading an operating system in the media distribution device, and performing a remedial action related to the network connection, in response to a determination that the network connection is not functional"; and

"removing the 1st diagnostic agent", "uploading a second diagnostic agent to the media distribution device in response to a determination that the first diagnostic agent is not functional" and "removing the 2nd diagnostic agent"; and

"examining a memory of the media distribution device for a first diagnostic agent and that also diagnostic data associated with a second device not physically connected to the media distribution is gathered".

However, in an analogous art, Prus teaches a cable system device that contains a program code (bootloader) that checks its own integrity and if functional, checks the operating system's integrity and if it is not functional, the bootloader code will report the status of the settop box and downloads a newer version of the operating system, after receiving a headend instruction (Abstract; col. 4 lines 35-67; col. 6 lines 53-67). In addition, if there exists another version of the bootloader in the smart card, it is temporarily stored (in other words, removed after received; col. 3 line 56-col. 4 line 6;) in the DRAM and then to the flash drive to avoid the case of a 'serious anomaly or bug in the bootloader code'. The bootloader is stored in a sector of flash memory 200, and in

order to self-check the memory needs to be accessed or checked (Fig. 2; col. 3 lines 41-46; col. 4 lines 7-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Middeke's invention with Prus' feature of having a software program checking its own integrity and the operating systems, and downloading a functional operating system if there's a failure in it, and temporarily downloading the bootloader code if it is not operable for the benefit of 'upgrading the settop box operating software without physically removing and replacing the memory device in which the code resides' (Prus: col. 1 lines 63-66) and to 'avoid running an abnormal bootloader code', (Prus: col. 6 lines 16-18).

Additionally, although Middeke and Prus teach that the monitoring and report of diagnostic data can include multiple devices (34, Fig. 2), they do not explicitly teach that the multiple devices are not physically connected to the media distribution device.

However, in an analogous art, Humpleman teaches a device (col. 6 lines 35-60) connected to multiple home devices (fig. 3) and appliances and that allows remote diagnosis(col. 21 line 47-col. 22 line 57).

Therefore, it would been obvious to one of ordinary skill in the art at the time of the invention to have modified Middeke and Prus' invention with Humpleman's feature of monitoring multiple local devices for the benefit of reducing the number of reports sent to a remote diagnostic server.

Regarding claim 2, Middeke, Prus and Humpleman teach the step of uploading the first diagnostic agent to the media distribution device (STB) over an alternative network connection, in response to a determination that the network connection is not functional (reads on Middeke in which the remote technician at the remote service, i.e., workstation 30, by analyzing the diagnostic information received from the receiver, Col. 3, lines 40-Col. 15, the remote technician able to determine whether or not the network connection is functional. In view of the result, the remote technician able to reset the receiver to factory default including the first diagnostic agent that was pre-loaded by default based on the network communication status; Col. 10, lines 35-63; for example if the strength of the satellite transponder is weak, the only way to communicate between the receiver 24 and the remote service center 30 is through the communication line 32 of Fig. 1 so the technician able to troubleshoot the receiver 24).

Regarding claim 4, Middeke, Prus and Humpleman teach the step of remedying the operational problem (Col. 10, lines 35-42).

Regarding claim 5, "the step of uploading a second diagnostic agent to the media distribution device, in response to a determination that the network connection is not functional" is analyzed with respect to claim 1 in which Middeke's remote technician at the remote service, i.e., workstation 30, by analyzing the diagnostic information received from the receiver, Col. 3, lines 40-Col. 15, the remote technician able to determine whether or not the network connection is functional. In view of the result, the Middeke's

remote technician in view of Medvinsky able to uploading a second diagnostic agent to the media distribution device through another communication link).

Claim 6 is analyzed with respect to claim 1.

Regarding claim 8, Middeke, Prus and Humpleman teach further discloses the media distribution device is a STB (see Fig. 2; Col. 4, lines 15-40).

Claim 9 is analyzed with respect to claim 1.

Regarding claim 10, Middeke, Prus and Humpleman teach wherein the intelligent diagnostic agent is executable in the system memory (Col. 6, lines 18-30).

Regarding claim 12, "wherein the diagnostic service center can determine whether the diagnostic agent is functional" is further by Middeke' as analyzed with respect to claim 1 in which the remote service, i.e., workstation 30, able to receive the diagnostic information from the receiver.

Regarding claim 13 is analyzed with respect to claim 1.

Regarding claim 14, Middeke, Prus and Humpleman teach wherein the communication link is a broadband communication (see Fig. 1).

Regarding claim 15, Middeke, Prus and Humpleman teach do not clearly disclose the use of an ADSL as communication link.

Official Notice is taken that the use of ADSL is notoriously well known in the art for telephone companies to offer "video dial tone" over twisted pair. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Middeke in view of Medvinsky to use ADSL as communication so to provide to user an alternative way to receive video at high-speed over telephone twisted pair network.

Regarding claim 16, Middeke, Prus and Humpleman teach wherein the communication link is a satellite connection (see Fig. 1).

Claims 17 and 18 are analyzed with respect to claim 1.

Claim 19 is analyzed with respect to claim 2.

Regarding claim 20, Middeke, Prus and Humpleman teach a media distribution service provider operative to transmit a media content stream to a media distribution device (see Fig. 1).

Claims 20, 21, 25, 26 are analyzed with respect to claim 1.

Claim 22 is analyzed with respect to claim 2.

Claim 24 is analyzed with respect to claim 4.

Claim 29 is analyzed with respect to claim 2.

Regarding claim 30, Middeke, Prus and Humpleman teach wherein the at least one 2nd communication path comprises a wireless link (Col. 3, lines 30-32).

Regarding claim 31, Middeke, Prus and Humpleman teach wherein the wireless link comprises satellite communication (Col. 3, lines 30-32).

Regarding claim 32, Middeke, Prus and Humpleman teach wherein code related to the 1st diagnostic software agent is stored in the media distribution device at the remote site for diagnostic testing and is later removed to allow more storage during an operational condition of the at least one device (see analysis of claim 1).

Regarding claim 33, Middeke, Prus and Humpleman teach wherein the first diagnostic software agent is interactive with a customer through a presentation device (Col. 4, lines 60-67+).

Regarding claim 34, Middeke, Prus and Humpleman teach the step of entering identification of a media distribution device in a service log (Col. 3, lines 40-Col. 4, lines 15).

Regarding claim 35, Middeke, Prus and Humpleman further teach wherein entering the identification of the media distribution device is performed autonomously by the diagnostic agent (Col. 4, lines 48-Col. 5, lines 13).

Regarding claim 36, Middeke, Prus and Humpleman further teach "presenting a user interface over the media presentation device; and receiving input from a user via the user interface" (Col. 3, lines 15-21)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR PARRA whose telephone number is (571)270-1449. The examiner can normally be reached on 9-6 PM (M-F, every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2421

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